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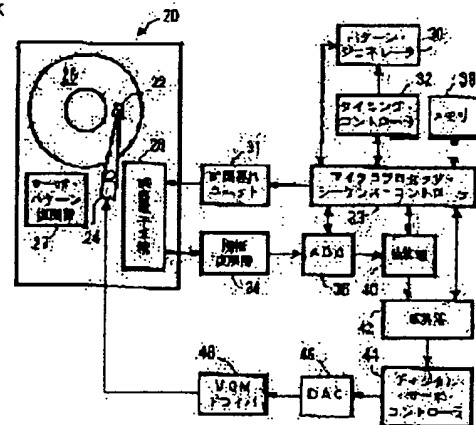
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## (54) METHOD AND SYSTEM FOR ACCURATE SELF-SERVO WRITING IN COMPANY WITH NORMALIZATION OF DISK DRIVE

(57)Abstract:

**PROBLEM TO BE SOLVED:** To perform the accurate and timewisely efficient self-servo writing by updating a reference value used for positioning a transporting unit as to a part of track to be written.

**SOLUTION:** A read back signal from a reading control electronic system 28 is supplied to an amplitude demodulating circuit 34 and digitized by an AD converter 36 then supplied to a division device 40. The reference value 'f' calculated from the sum of a nominal average reference value and an adjusted value suitable for the present track is sent to the division device 40 from the AD converter 36. In the division device 40, this value is divided by the normalized value, and the resulted propagating burst fractional amplitude is supplied to a subtractor 42 to obtain a positional error signal PES. At this time point, a signal is transmitted to a digital servo controller 44 by a microprocessor sequence controller 33 to read out the signal PES, then a new control voltage is set. Thus, the signal PES is adjusted by an actuator 24 to update the reference value to be used for the positioning operation.



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